

WHAT IS CLAIMED IS:

1. A load balancing method for a first network and a second network, said second network having a plurality of segments each connecting terminals, for relaying data between the first and second networks, said method comprising the steps of:

storing source addresses of the terminals for relaying data in the first network, in a terminal address table provided in each apparatus relaying data between the terminals and the first network;

measuring a load of data to be relayed in the first network and exchanging load data between a plurality of the apparatus;

if the load of data to be relayed in the first network via one apparatus is largest or relatively large, selecting another apparatus having a smallest or relatively small load, and deleting a source address selected in accordance with the load to be relayed in the first network for each of source addresses of the terminals, from said terminal address table;

notifying the source address of the terminal deleted from the terminal address table of said one apparatus to the selected other apparatus; and

storing the notified source address in the terminal address table of the notified other apparatus.

2. A load balancing method according to claim 1, further comprising the steps of:

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when a failure at the other apparatus is detected, judging whether the load of the one apparatus is smallest or relatively small; and

if the load of the one apparatus is smallest or relatively small, inheriting an entry of said other apparatus.

3. A load balancing apparatus comprising:

a measuring unit for measuring a load of data to be relayed in a network;

a statistical processing unit for exchanging load data measured by said measuring unit between the apparatus and other apparatus;

a data recording unit for recording the load data to be relayed in the network, respectively of each of the other apparatus and each terminal and received from said statistical processing unit;

a terminal address table for recording as an entry a source address of each terminal for relaying data in the network;

a condition setting unit for judging from the load data recorded in said recording unit whether the load of the apparatus is largest or relatively large, and if the load is largest or relatively large, determining an entry which is passed to the other apparatus having a smallest or relatively small load; and

a terminal table managing unit for notifying the entry determined by said condition setting unit to

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the other apparatus and deleting the entry from the  
terminal address table.

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